Palmer Research Center

Agricultural and Forestry Experiment Station

School of Agriculture and Land Resources Management

UNIVERSITY OF ALASKA FAIRBANKS

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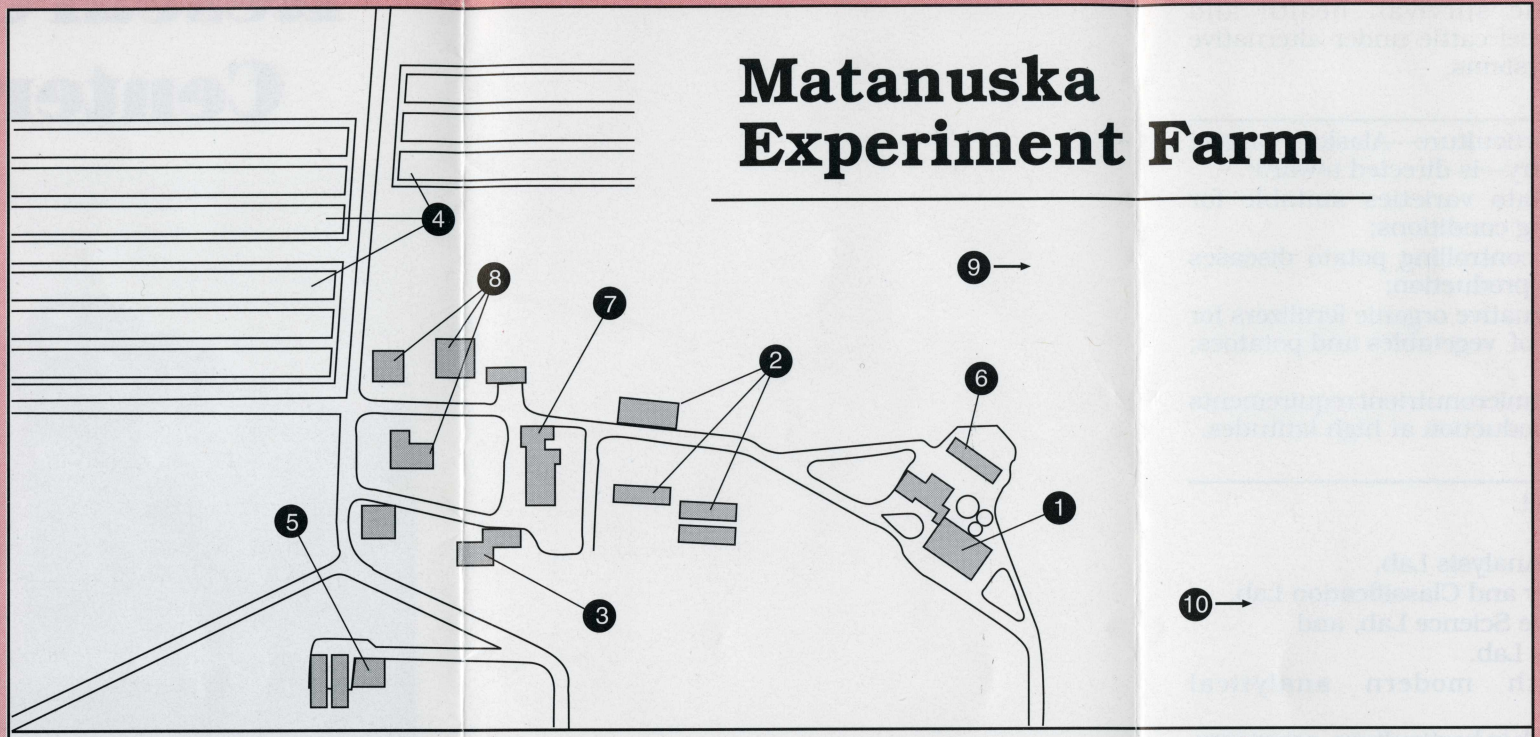
PALMER RESEARCH CENTER. The Agricultural and Forestry Experiment Station, University of Alaska Fairbanks, operates the Palmer Research Center. Included are offices and laboratory facilities in Palmer and the Matanuska Experiment Farm outside of Palmer. Researchers at these locations solve problems related to agriculture, forestry and the environment. State and federal agencies, private industry and the university sponsor and fund the research.

MATANUSKA EXPERIMENT FARM. This facility is located on Trunk Road off the George Parks Highway about 36 miles north of Anchorage. It includes 260 acres of cultivated land and 800 acres of forest land for research or demonstration purposes. The experiment farm has field and laboratory facilities for research on soils, plants and livestock. A forest tree nursery, operated by the Alaska Department of Natural Resources, is located adjacent to the experiment farm. This facility includes a modern headhouse and physical plant capable of supporting six greenhouse units. Weather records are maintained at the experiment farm.

MISSION. As a unit of the School of Agriculture and Land Resources Management, the center's three-part mission is research, teaching and public service. Facilities at the center are used by UAF undergraduate and graduate students pursuing studies in Southcentral Alaska. ♠

Palmer Research Center

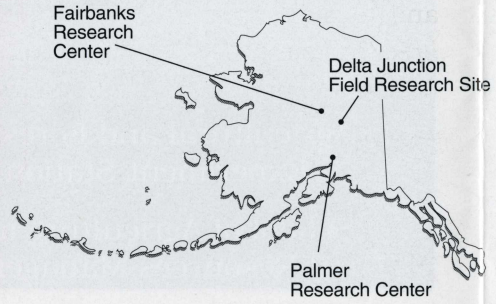
Matanuska Experiment Farm



Guide

1. dairy facility
2. equipment storage
3. farm shop
4. field research plots—45 acres
5. forestry tree nursery
6. hay storage
7. research laboratory
8. staff residences
9. 260 acres of cultivated land
10. 800 acres of forest land

Research Facilities, Agricultural and Forestry Experiment Station



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History

♠ 1917: Established as a United States Department of Agriculture (USDA) agricultural experiment station.
♠ Designed to conduct research and promote agriculture in Southcentral Alaska.
♠ 1931: Transferred to the University of Alaska.

Matanuska Experiment Farm

♠ The Matanuska Experiment Farm provides a site in Southcentral Alaska for research in sustainable agriculture, land reclamation and other environmental issues.

Agronomy

♠ Research on soil and crop management for sustainable agriculture emphasizes:

- Plant breeding with special attention to the development of small grain varieties adapted to northern latitudes;
- Forage quality including the development of alternative forages with superior nutritional qualities for high latitudes;
- Soil science involving the classification of arctic and subarctic soils, carbon cycling in arctic soils in relation to global change, cooperative Russian-Alaska research on permafrost-affected soils in Alaska and eastern Siberia; and
- Range science and ecology in research on the reclamation and revegetation of lands disturbed by oil and mining development in the north.

Animal Science

♠ Research on the nutritional characteristics of Alaskan livestock feeds and alternative management systems for milk and meat production in Alaska includes:

- The use of Alaska–grown feeds and on-farm inputs in sustainable dairy production;
- Maximizing the use of Alaska forages for beef cattle production through alternative management techniques;
- Developing management systems for livestock production that will ensure water quality; and
- Comparing the survival, health and economics of beef cattle under alternative management systems.

Horticulture

♠ Research on horticulture—Alaska's largest agricultural industry—is directed toward:

- Evaluating potato varieties suitable for Alaska's growing conditions;
- Assessing and controlling potato diseases for sustainable production;
- Evaluating alternative organic fertilizers for the production of vegetables and potatoes; and
- Determining the micronutrient requirements for vegetable production at high latitudes.

Laboratory

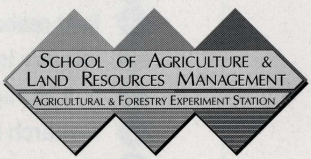
♠ 8,500 square feet.
♠ Houses:

- Soil and Plant Analysis Lab,
- Soil Morphology and Classification Lab,
- Plant and Range Science Lab, and
- Plant Pathology Lab.

♠ Equipped with modern analytical instruments.
♠ Supports research in horticulture, agronomy, forestry, plant pathology, arctic soils, revegetation, animal science and various environmental research projects.
♠ Available for contract analysis by other university units, public agencies and the private sector.

Facilities for Research

♠ Include an 80 cow dairy, 80 head beef herd and supporting barns, feed storage facilities and pasture land.
♠ Complete complement of farm equipment for the production and harvest of grain, forage (both hay and silage), and other crops.
♠ Specialized equipment for research-plot work in potatoes, vegetables, grains and forage.
♠ Complete shop for major and minor repair of farm equipment and vehicles.



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